

# **A GIS Approach to the Assignment of Supervision Cases in Franklin County - Ohio**

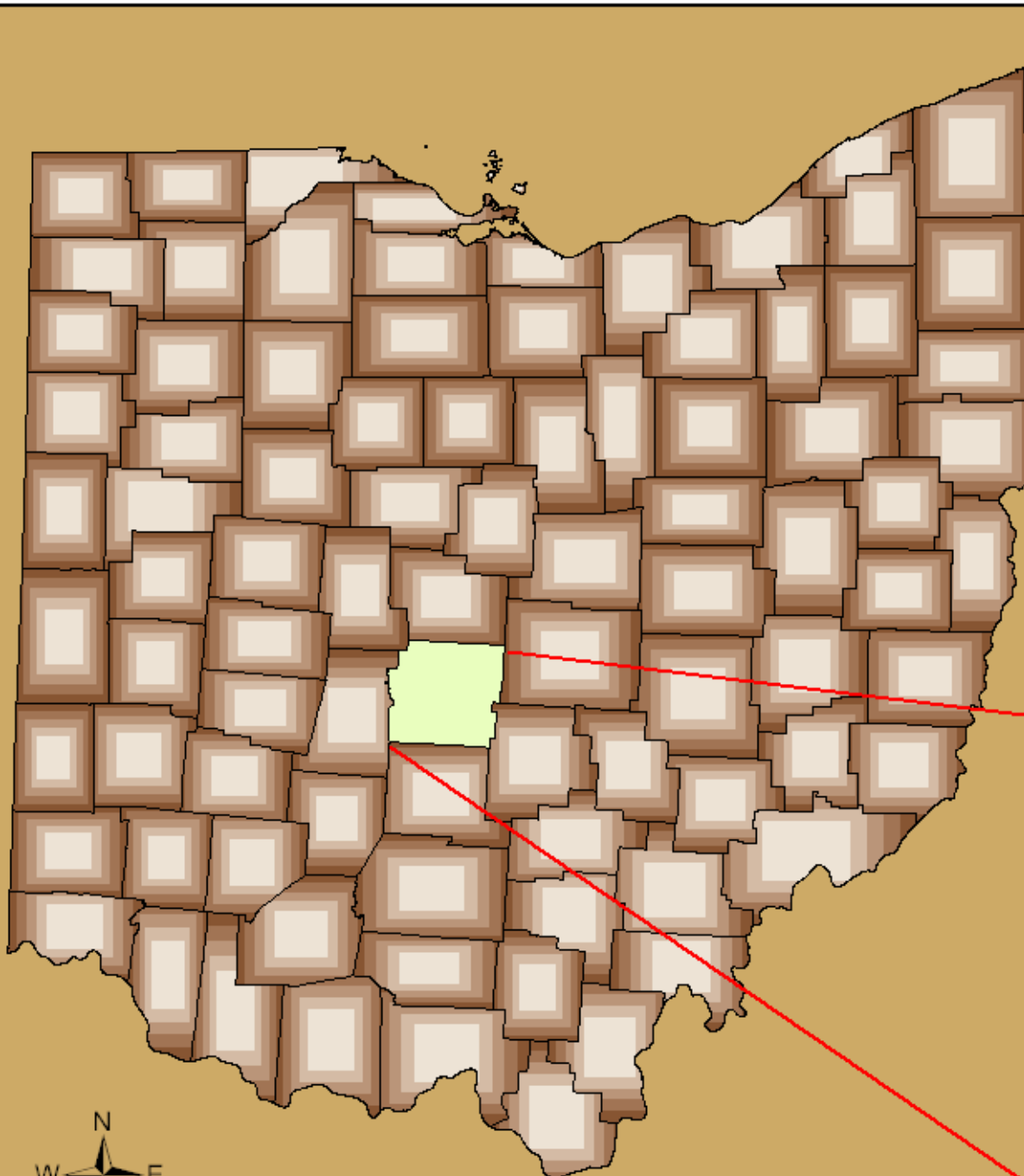
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Ohio Department of Rehabilitation and Correction**

# APA Regions



# Study Area



## Franklin County Profile

Franklin County popn :	1,068,978
Popn in Columbus :	711,644
# of Parolees :	2,555
# of Parole Officers :	36
# of APA units :	9
APA units 3,7 & 8 :	Post-prison cases.
APA units 4 & 5 :	Transitional Control cases.

Sex offenders are not included in this analysis.



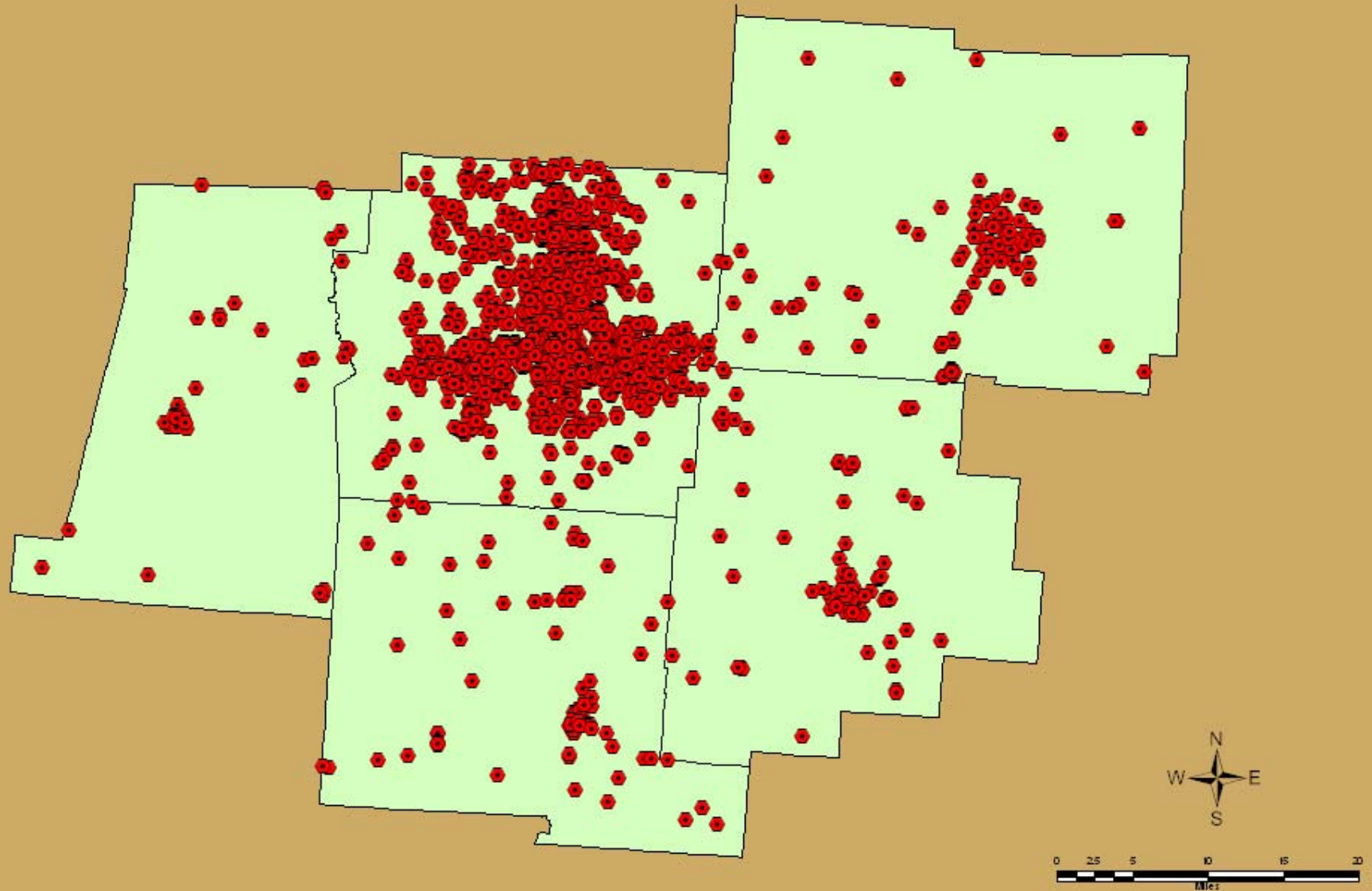
Franklin County



# Why Assign Cases Geographically?

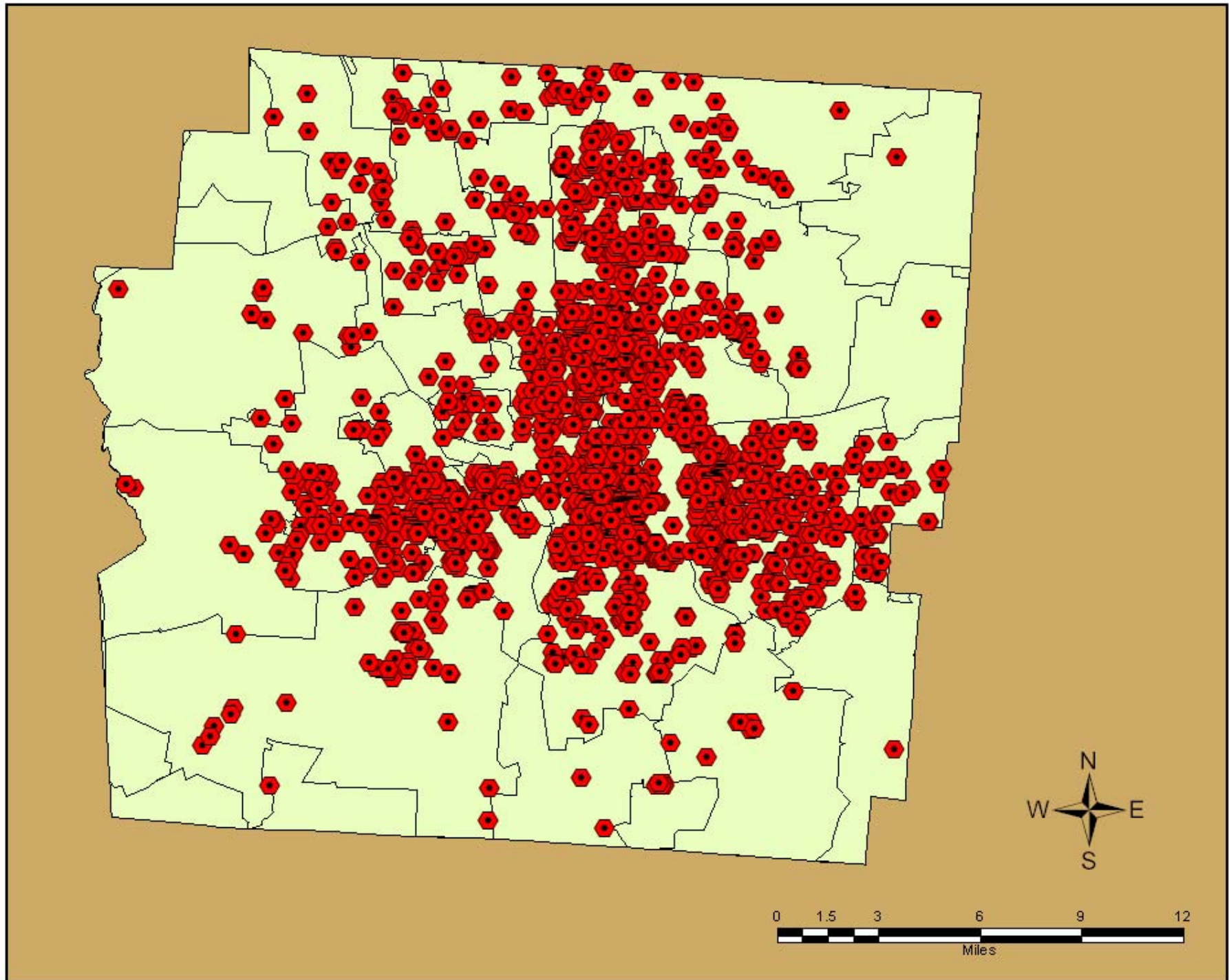
- Concentrated caseloads may generate an increase in effectiveness.
- Reduces travel times across county for home visits.
- Facilitates more visits and easier contacts.
- Fosters better working relationships with local law enforcement.
- Provides better knowledge of resources and programs.
- Allow officers to better understand offender's environment.

# Offenders in Columbus Region

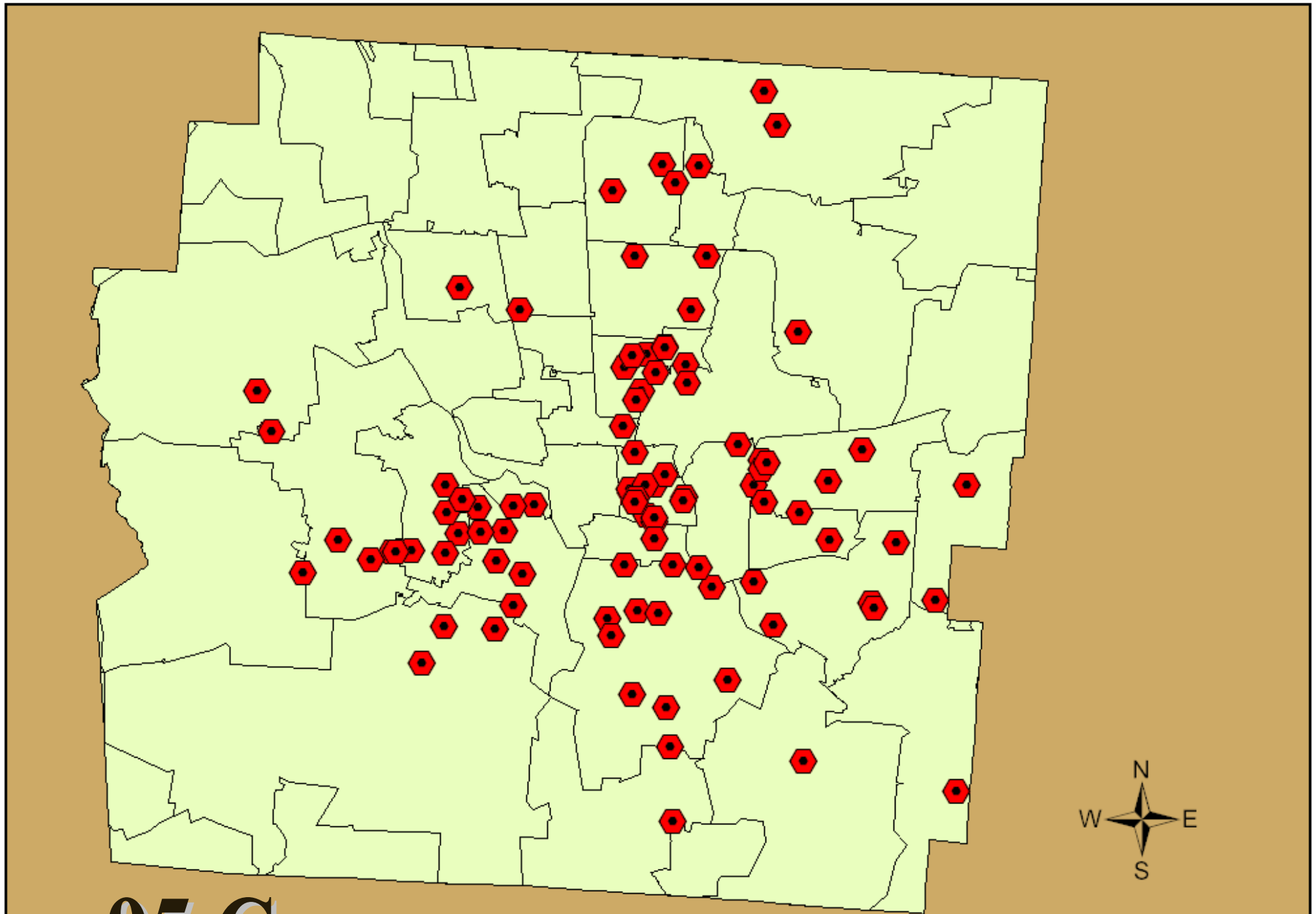




# Offenders in Franklin County



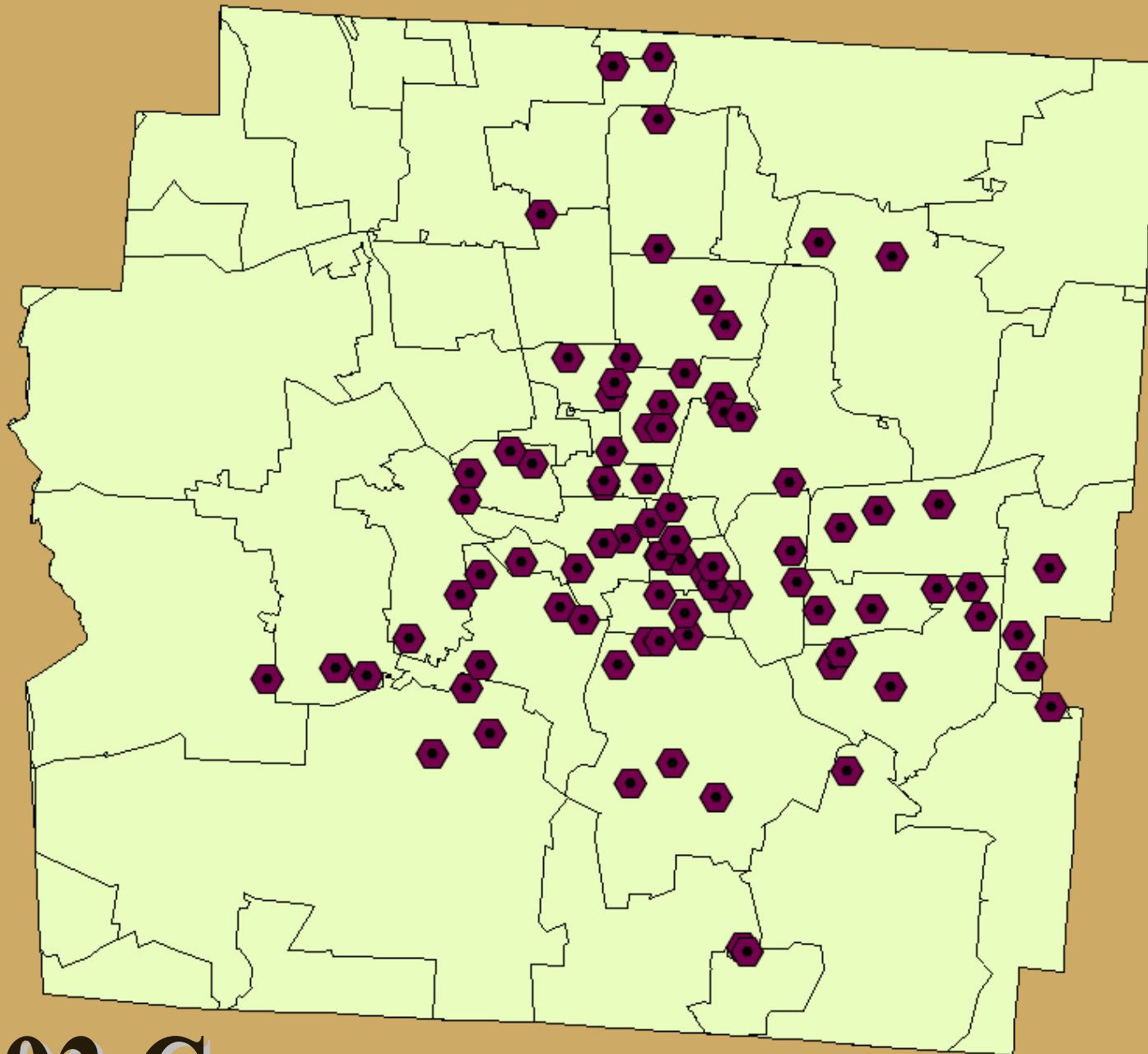
# Officer Caseload



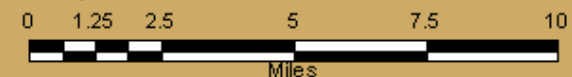
**95 Cases**



# Officer Caseload

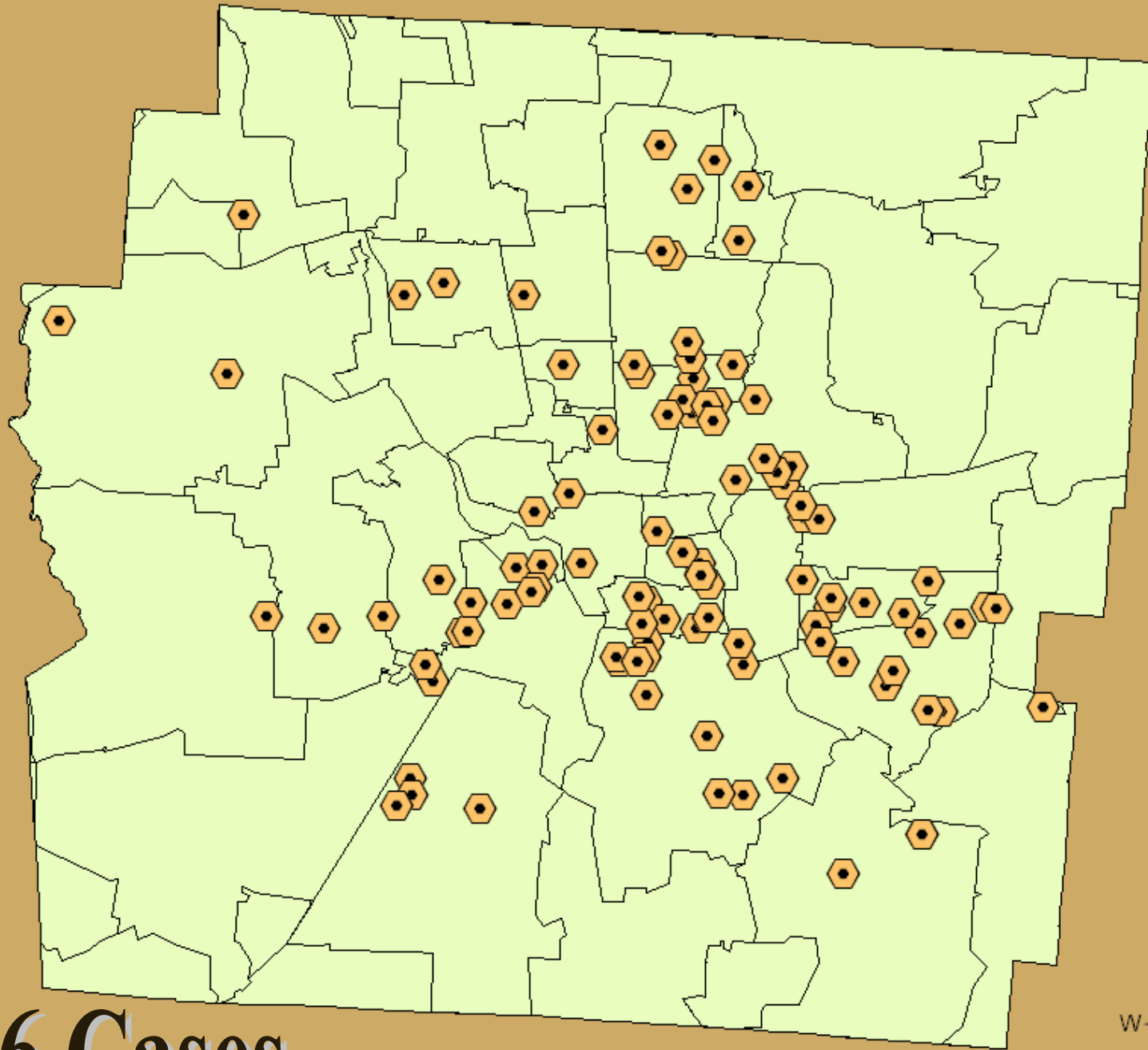


**93 Cases**

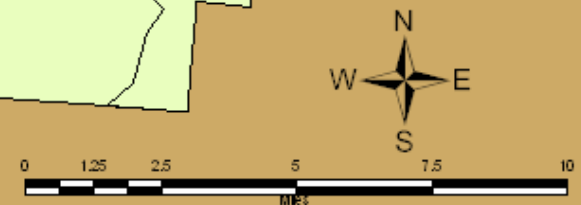




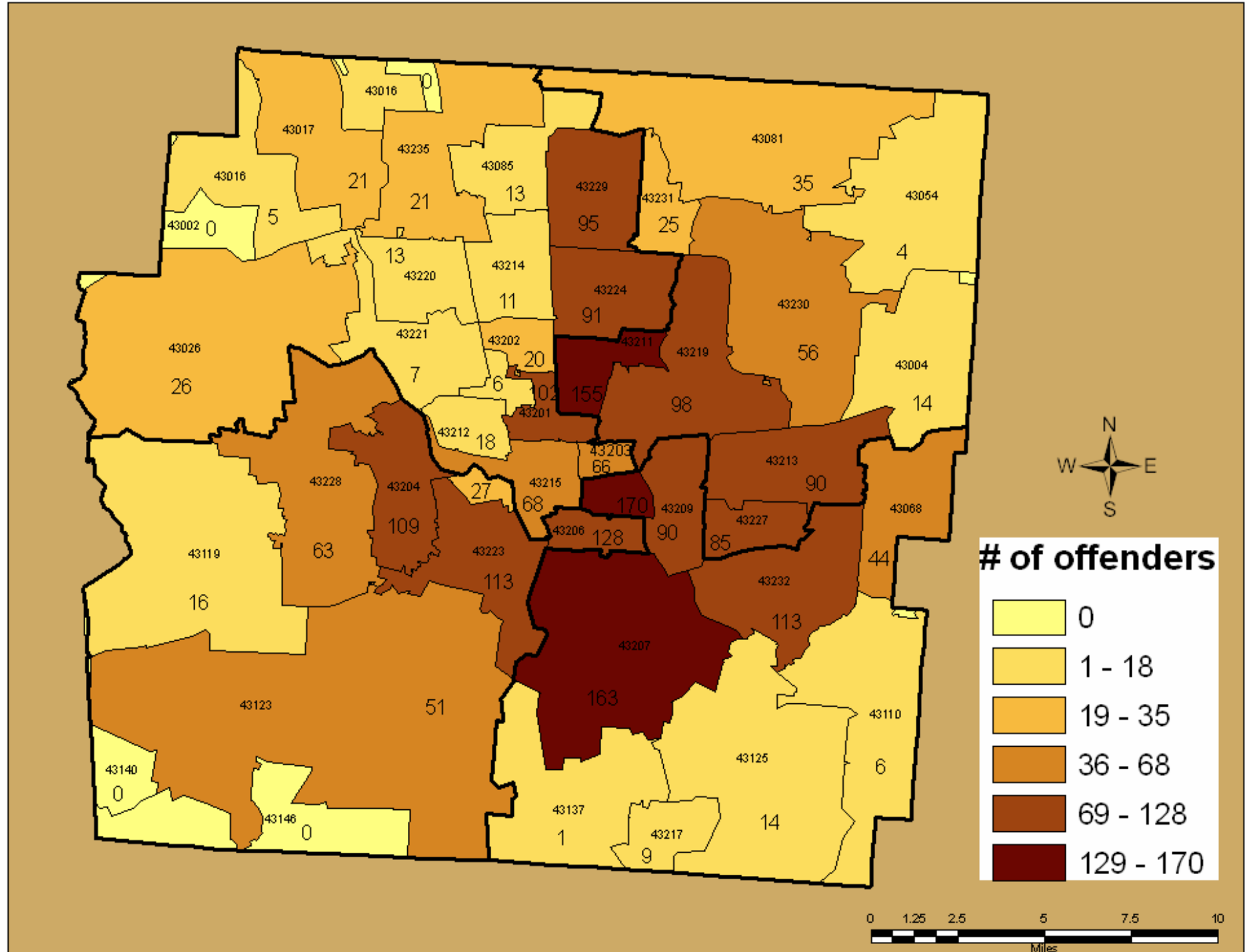
# Officer Caseload



106 Cases



# Offenders in Franklin County

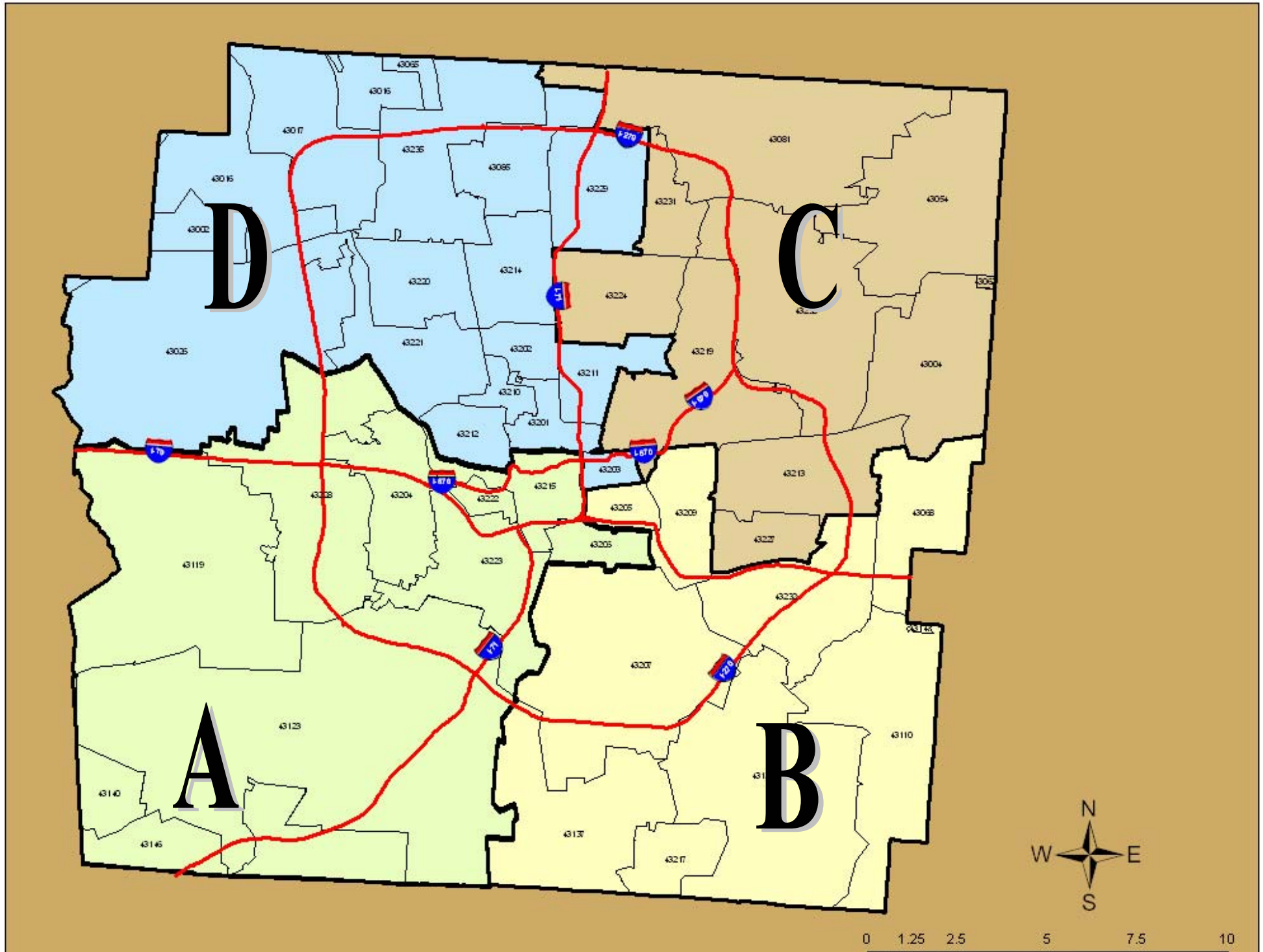


# Some Factors to Consider when Designing a District Supervision Plan

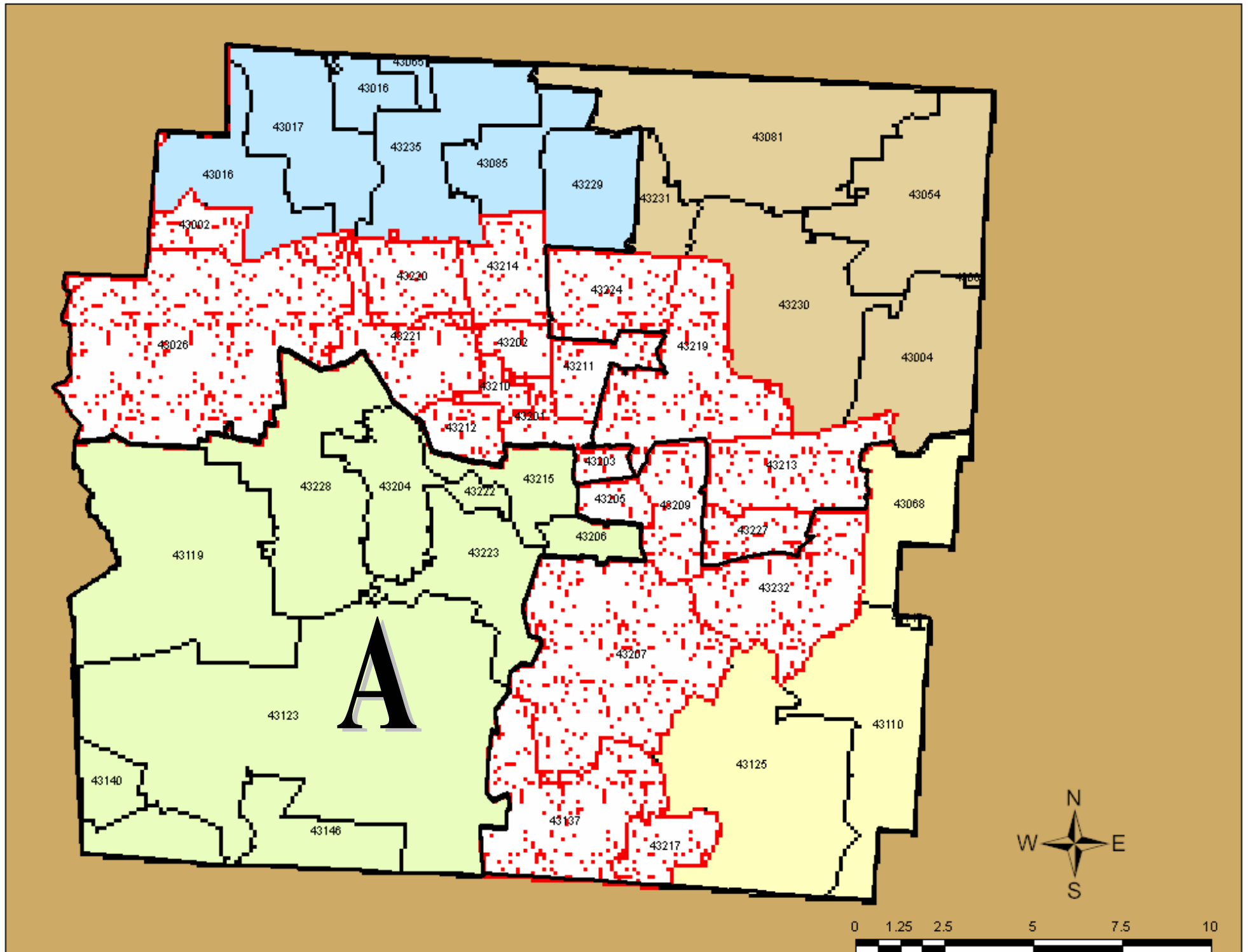
- Over time, some officers will try to find ways to make their job easier.
- Many parolees will also try to find ways to reduce the control of a parole officer.
- Tough districts may lead to officer burn out and high turnover of staff. This could reduce the quality of oversight.
- Each district should have about the same number of cases, including high risk offenders.
- Ability to minimize reassignment of cases.



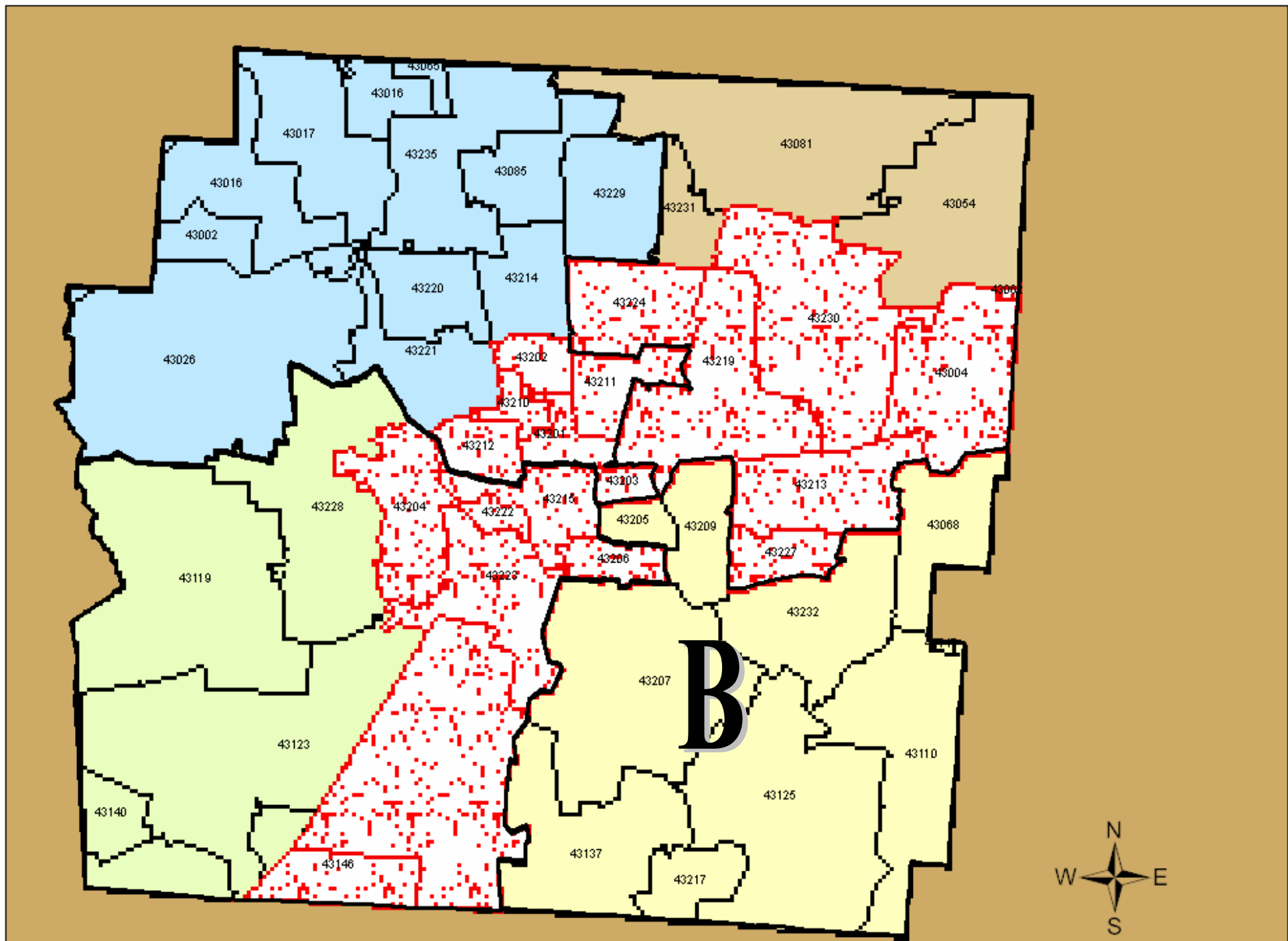
# District Boundaries



# Buffer for District A



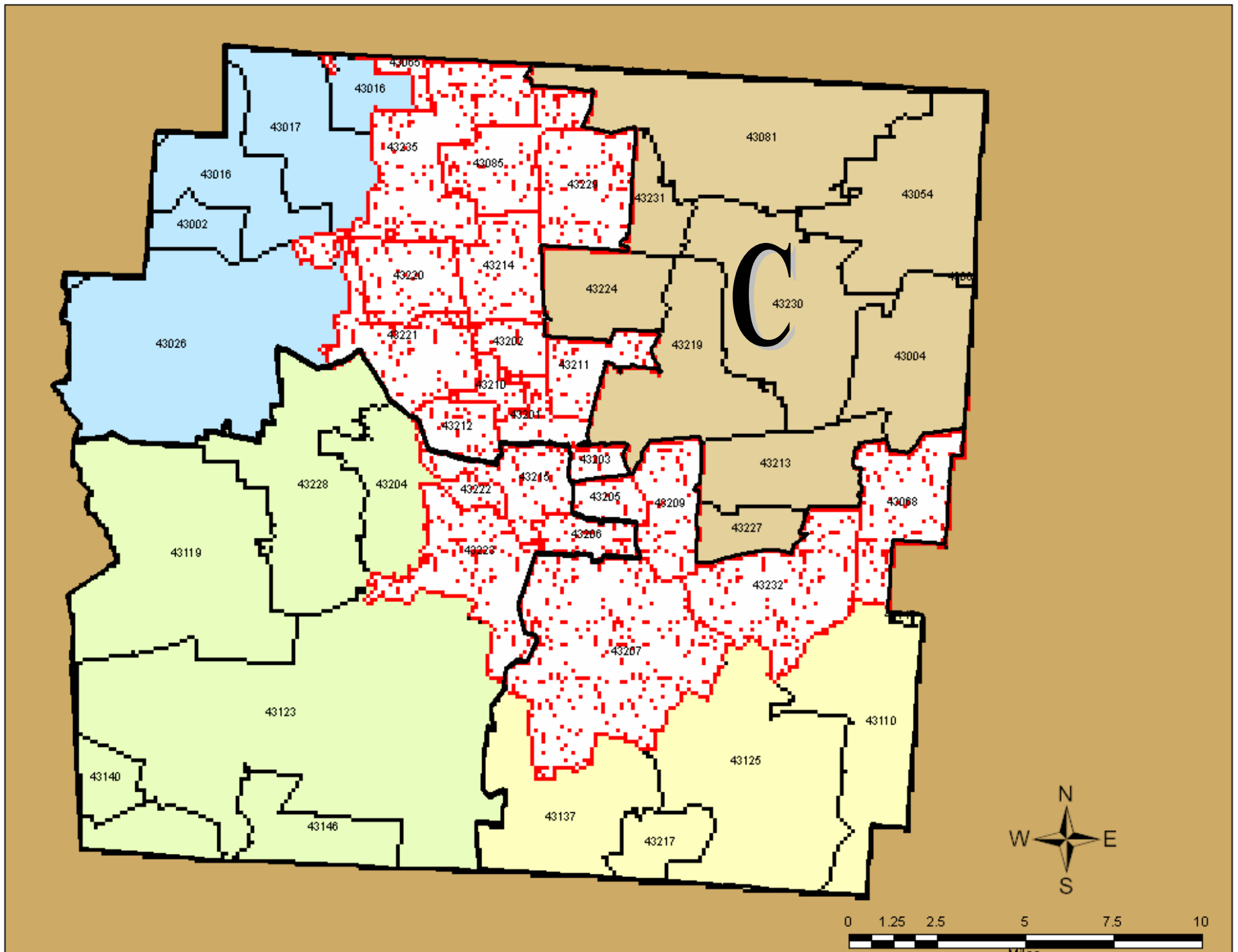
# Buffer for District B



0 1.25 2.5 5 7.5 10



# Buffer for District C





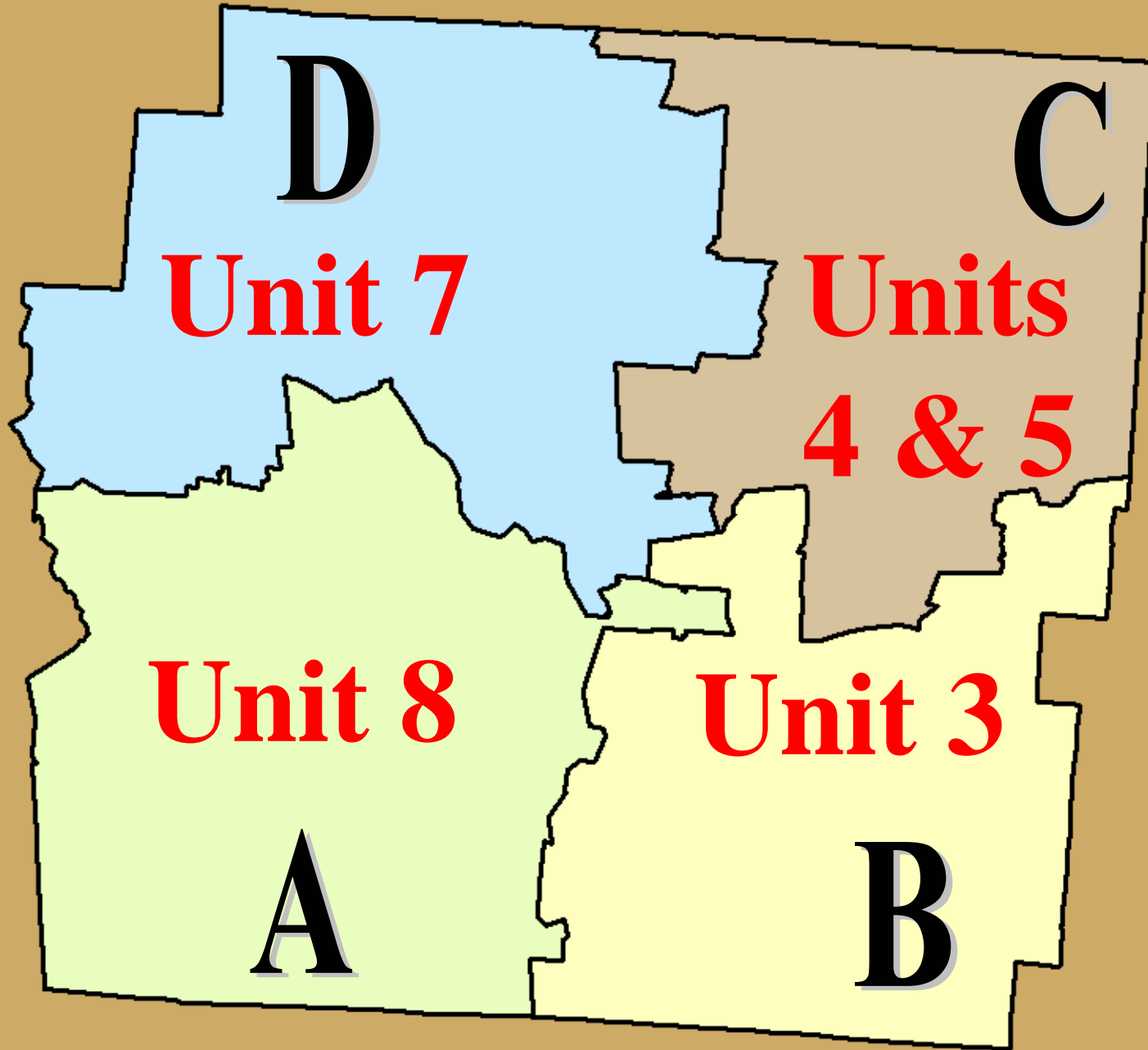
# Review of Geographic Assignment of Cases

In Franklin County

- *Phase-in started on June 1, 2005*



# APA Units Assigned to Districts



# **Objective of Review**

**To ascertain whether caseload shifts match the plan.**

# Methodology

- **Geocoded offender residential addresses and created graduated color maps to facilitate analysis of zip codes with high and low caseloads.**
- **Created buffer zones along each district.**
- **Selected offenders assigned to APA units to determine the number of offenders in the respective districts.**
- **Used matrix tables to show statistics on offenders in numbers and percentages.**



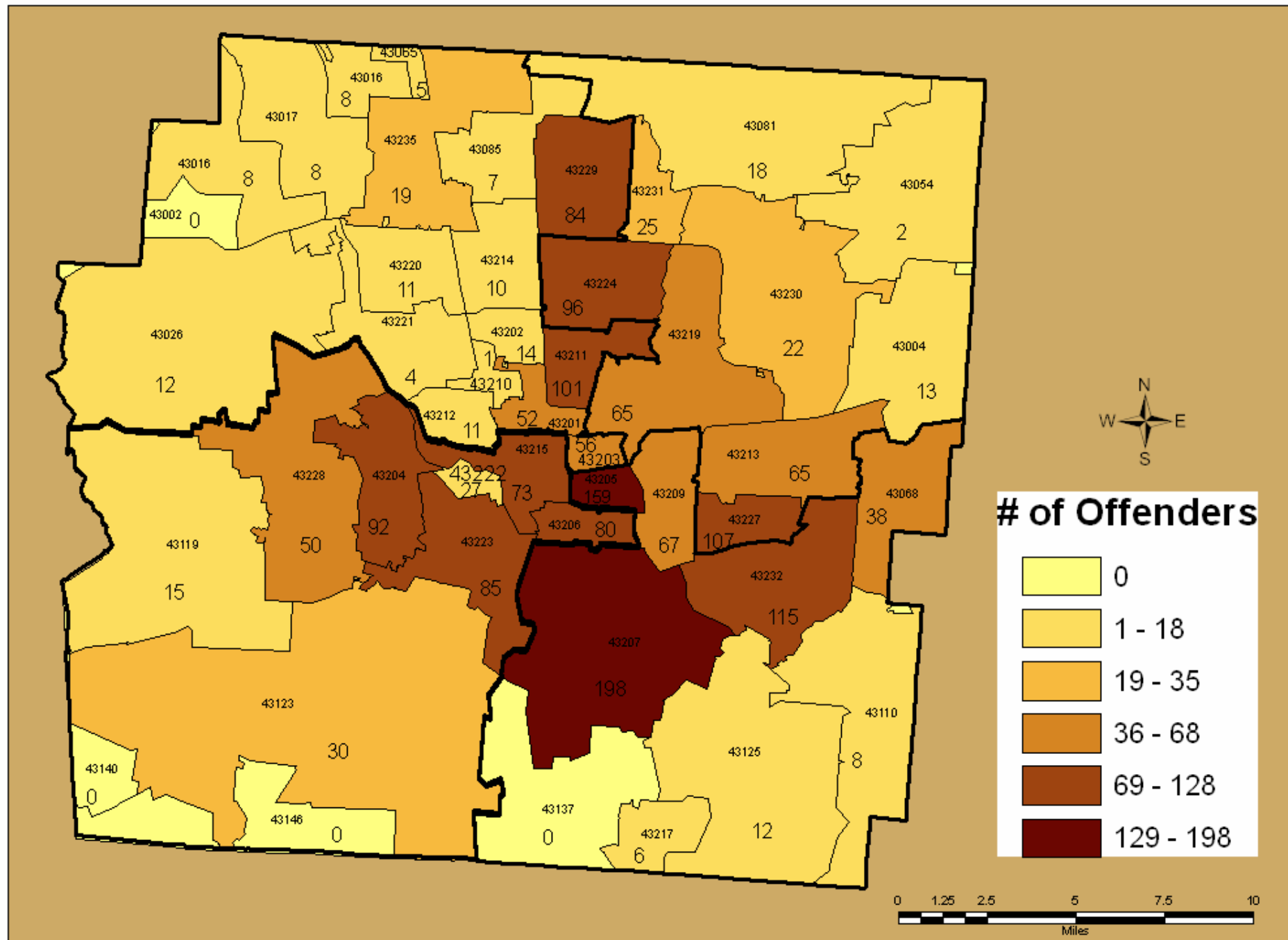
# Results





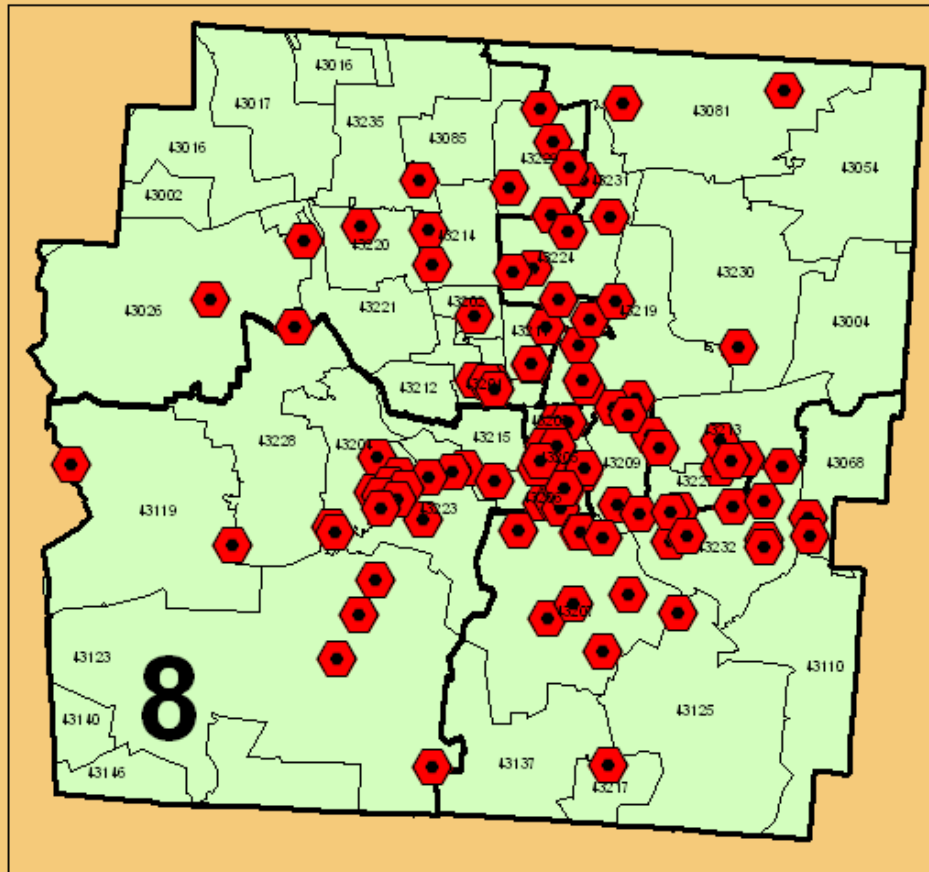
# Offenders in Franklin County

## Dec. 2006

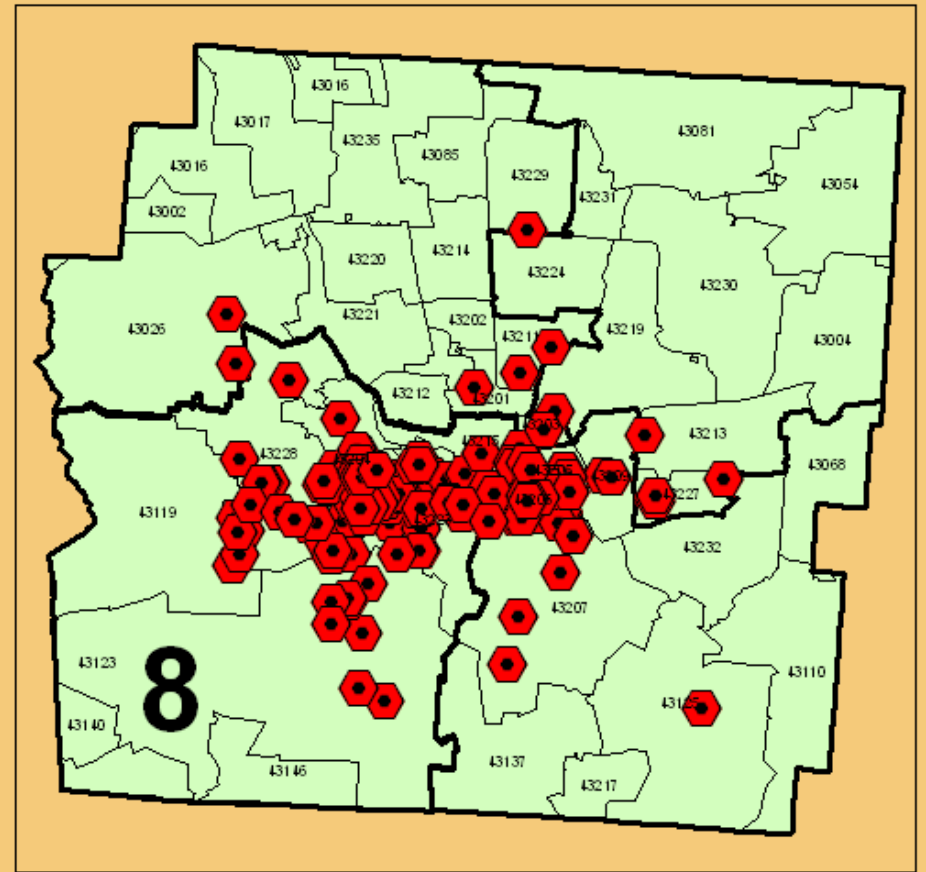


# Distribution of Cases Assigned to Unit 8

Cases Assigned in 2004



Cases Assigned in 2006



# District Caseload Concentration

Districts	July 05	Jan 06	July 06	Jan 07
A	29.9	40.1	59.1	70.2
B	23.4	35.6	53.0	63.4
C	16.3	23.1	36.2	44.2
D	27.6	40.3	55.6	54.3



# Distribution of Cases in Districts and Buffer Zones

Units	3		4 & 5		7		8	
	Jul 05	Jan 07	Jul 05	Jan 07	Jul 05	Jan 07	Jul 05	Jan 07
In Unit	19.0	62.0	10.2	44.6	22.6	52.8	34.2	67.0
In Buffer	56.4	31.1	75.3	48.3	56.0	41.8	52.9	27.0
Out of Buffer	<b>24.4</b>	<b>6.8</b>	<b>14.4</b>	<b>7.0</b>	<b>21.3</b>	<b>5.2</b>	<b>12.8</b>	<b>4.0</b>



# Supervision Levels

Units	Intensive	Basic High	Basic Medium	Basic Low	M. Time	Total
3	6.9	0.5	82.4	0.1	9.8	100
4 & 5	9.4	0.0	79.8	0.9	9.8	100
7	6.4	0.0	77.3	9.6	6.6	100
8	6.8	0.2	78.5	8.0	6.2	100

# Observations after 2 Years of Implementation

- Assignment of cases to the expected districts has improved considerably.
- No unusually high number of cases in any of the districts.
- Case concentrations in the assigned districts doubled.
- There is an almost comparable proportions of higher risk offenders distributed in the units.
- Over 90% of offender moves occur within the districts and buffers.
- Maps are consistent and do not show major variations that raises concern.



# Conclusion

- It is envisaged that cases assigned to the expected districts will steadily increase while cases outside their assigned districts will decline over time through attrition.
- This district supervision plan has minimized reassignment of cases.